

1 1. In a cellular network that facilitates the transmission of messages between
2 cellular computing devices, the messages often being multi-part messages that consist of
3 multiple short message fragments of limited size, a method for facilitating an application
4 sending the multiple short message fragments without having the calling application
5 implement detailed processing required to fragment the message, the method comprising
6 the following:

7 an act of receiving a function call from a calling application via a standardized
8 interface, the function call requesting the transmission of a message over the cellular
9 network;

10 an act of dividing the message into a number of short message fragments of limited
11 size; and

12 an act of causing each of the short message fragments to be transmitted over the
13 cellular network.

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15 2. A method in accordance with Claim 1, wherein the act of receiving a
16 function call from a calling application via a standardized interface comprises the
17 following:

18 an act of receiving a function call from a calling application via an application
19 program interface.

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21 3. A method in accordance with Claim 1, wherein the act of the receiving a
22 function call from a calling application via a standardized interface comprises the
23 following:

24 an act of receiving a function call from a standardized user interface.

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2 4. A method in accordance Claim 1, further comprising the following:
3 an act of processing the message prior to the act of dividing the message into a
4 number of short message fragments.

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6 5. A method in accordance with Claim 4, wherein the act of processing the
7 message comprises the following:
8 an act of compressing the message.

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10 6. A method in accordance with Claim 4, wherein the act of processing the
11 message comprises the following:
12 an act of encrypting the message.

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14 7. A method in accordance with Claim 4, wherein the act of processing the
15 message comprises the following:
16 an act of wrapping the message in XML.

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18 8. A method in accordance with Claim 1, further comprising the following
19 prior to the act of dividing the message into a number of short message fragments of
20 limited size:

21 an act of determining that the message must be transmitted as a plurality of short
22 messages in order to comply with a size restriction of the cellular network.
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1 9. A method in accordance with Claim 1, wherein the cellular network is a
2 Global System for Mobile communication (GSM) cellular network.

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4 10. A method in accordance with Claim 1, wherein the cellular network
5 implements TDMA cellular technology.

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7 11. A method in accordance with Claim 1, wherein the cellular network
8 implements CDMA technology.

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10 12. A method in accordance with Claim 1, wherein the cellular network
11 implements wireless CDMA technology.

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13 13. A method in accordance with Claim 1, wherein the cellular network
14 implements 1xRTT technology.

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16 14. A method in accordance with Claim 1, wherein the cellular network
17 implements 3G technology.

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19 15. A method in accordance with Claim 1, wherein the cellular network
20 implements UMTS technology.

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22 16. A method in accordance with Claim 1, wherein the cellular network
23 implements CDMA2000 technology.

1 17. A method in accordance with Claim 1, further comprising the following:
2 an act of receiving a request for a delivery report for the message from the calling
3 application;
4 an act of gathering delivery reports received back from the communication network
5 for each short message fragment;
6 an act of interpreting the gathered delivery reports for each of the short message
7 fragments to determine an appropriate delivery response for the message as a whole; and
8 an act of returning the appropriate delivery response for the message as a whole to
9 the calling application.

10
11 18. A method in accordance with Claim 17, wherein the act of receiving a
12 request for a delivery report is performed via the standardized interface.

13
14 19. A method in accordance with Claim 17, wherein the act of returning the
15 appropriate delivery response is performed via the standardized interface.

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20. A computer program product for use in a cellular network that facilitates the transmission of messages between cellular computing devices, the messages often being multi-part messages that consist of multiple short message fragments of limited size, the computer program product for implementing a method for facilitating an application sending the multiple short message fragments without having the calling application implement detailed processing required to fragment the message, the computer program product comprising one or more computer-readable media having stored thereon the following:

computer-executable instructions for receiving a function call from a calling application via a standardized interface, the function call requesting the transmission of a message over the cellular network;

computer-executable instructions for dividing the message into a number of short message fragments of limited size; and

computer-executable instructions for causing each of the short message fragments to be transmitted over the cellular network.

21. A computer program product in accordance with Claim 20, wherein the one or more computer-readable media are physical storage media.

22. A computer program product in accordance with Claim 20, wherein the computer-executable instructions for receiving a function call from a calling application via a standardized interface comprise the following:

computer-executable instructions for receiving a function call from a calling application via an application program interface.

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23. A computer program product in accordance with Claim 20, wherein the computer-executable instructions for receiving a function call from a calling application via a standardized interface comprise the following:

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computer-executable instructions for receiving a function call from a standardized user interface.

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24. A computer program product in accordance with Claim 20, wherein the one or more computer-readable media further have stored thereon the following:

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computer-executable instructions for determining that the message must be transmitted as a plurality of short messages in order to comply with a size restriction of the cellular network prior to executing the computer-executable instructions for dividing the message into a number of short message fragments of limited size.

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25. A computer program product in accordance with Claim 20, wherein the one or more computer-readable media further have stored thereon the following:

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computer-executable instructions for receiving a request for a delivery report for the message from the calling application;

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computer-executable instructions for gathering delivery reports received back from the communication network for each short message fragment;

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computer-executable instructions for interpreting the gathered delivery reports for each of the short message fragments to determine an appropriate delivery response for the message as a whole; and

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1 computer-executable instructions for returning the appropriate delivery response for
2 the message as a whole to the calling application.
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1 26. In a cellular network that facilitates the transmission of messages between
2 cellular computing devices, the messages often being multi-part messages that consist of
3 multiple short message fragments of limited size, a method for facilitating an application
4 sending the multiple short message fragments without having the calling application
5 implement detailed processing required to fragment the message, the method comprising
6 the following:

7 an act of receiving a function call from a calling application via a standardized
8 interface, the function call requesting the transmission of a message over the cellular
9 network; and

10 a step for transmitting the message over the cellular network in response to the
11 function call.

12
13 27. A method in accordance with Claim 26, wherein the step for transmitting
14 the message over the cellular network in response to the function call comprises the
15 following:

16 an act of dividing the message into a number of short message fragments of limited
17 size; and

18 an act of causing each of the short message fragments to be transmitted over the
19 cellular network.

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1 28. In a cellular network that facilitates the transmission of messages between
2 cellular computing devices, the messages often being multi-part messages that consist of
3 multiple short message fragments of limited size, a method for a receiving application to
4 receive a multi-part message, the method comprising the following:

5 an act of receiving a plurality of short message fragments corresponding to a multi-
6 part message;

7 an act of reassembling the plurality of fragments into the multi-part message; and

8 an act of passing the reassembled message to a receiving application via a
9 standardized interface.

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11 29. A method in accordance with Claim 28, wherein the act of passing the
12 reassembled message to a receiving application via a standardized interface comprises the
13 following:

14 an act of passing the reassembled message to a user interface.

15
16 30. A method in accordance with Claim 28, wherein the act of passing the
17 reassembled message to a receiving application via a standardized interface comprises the
18 following:

19 an act of passing the reassembled message to a receiving application via an
20 application program interface.

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22 31. A method in accordance with Claim 28, further comprising the following:

1 receiving a function call from the receiving application via a standardized
2 interface, the function call requesting the processing and forwarding of complete multi-part
3 messages.
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32. A computer program product for use in a cellular network that facilitates the transmission of messages between cellular computing devices, the messages often being multi-part messages that consist of multiple short message fragments of limited size, the computer program product for implementing a method for a receiving application to receive a multi-part message without performing the detailed processing necessary to reassemble the message, the computer program product comprising one or more computer-readable media having stored thereon the following:

- computer-executable instructions for receiving a plurality of short message fragments corresponding to a multi-part message;
- computer-executable instructions for reassembling the plurality of fragments into the multi-part message; and
- computer-executable instructions for passing the reassembled message to a receiving application via a standardized interface.

33. A computer program product in accordance with Claim 32, wherein the computer-executable instructions for passing the reassembled message to a receiving application via a standardized interface comprise the following:

- computer-executable instructions for passing the reassembled message to a user interface.

34. A computer program product in accordance with Claim 32, wherein the computer-executable instructions for passing the reassembled message to a receiving application via a standardized interface comprise the following:

1 computer-executable instructions for passing the reassembled message to a
2 receiving application via an application program interface.
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4 35. A computer program product in accordance with Claim 32, wherein the one
5 or more computer-readable media further have stored thereon the following:

6 computer-executable instructions for receiving a function call from the receiving
7 application via a standardized interface, the function call requesting the processing and
8 forwarding of complete multi-part messages.
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10 36. A computer program product in accordance with Claim 32, wherein the one
11 or more computer-readable media are physical storage media.

FILED